EAST Search History

DATE: Saturday, October 19, 2002

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,DWPI; PLUR=YES; OP=ADJ		
L4	iridophores and melanophores and xanthophores and leucophores	3	L4
L3	l1 and medaka	13	L3
L2	L1 and (medka or fish)	8570	L2
L1	see through or see-through or transparen$	631530	L1

END OF SEARCH HISTORY

$%^STN;HighlightOn= ***;HighlightOff=*** ;

Welcome to STN International! Enter x:x

LOGINID:ssspta1633cxq

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

********** Welcome to STN International **********

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 08 "Ask CAS" for self-help around the clock
NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4 Apr 09 ZDB will be removed from STN
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985

NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

********** STN Columbus **********

FILE 'HOME' ENTERED AT 19:32:46 ON 19 OCT 2002

=> s iridophore? and melanophore? and xanthophore? and leucophore?
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FIL BIOSIS EMBASE CAPLUS

COST IN U.S. DOLLARS	ENTRY	SINCE FILE SESSION	TOTAL
FULL ESTIMATED COST		0.21	0.21

FILE 'BIOSIS' ENTERED AT 19:33:34 ON 19 OCT 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 19:33:34 ON 19 OCT 2002
COPYRIGHT (C) 2002 Elsevier Science B.V. All rights reserved.

FILE 'CAPLUS' ENTERED AT 19:33:34 ON 19 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

=> s iridophore? and melanophore? and xanthophore? and leucophore?

L1 7 IRIDOPHORE? AND MELANOPHORE? AND XANTHOPHORE? AND LEUCOPHORE?

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2 6 DUP REM L1 (1 DUPLICATE REMOVED)

=> d bib abs 1-
YOU HAVE REQUESTED DATA FROM 6 ANSWERS - CONTINUE? Y/(N):y

L2 ANSWER 1 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2002:368147 BIOSIS
DN PREV200200368147
TI Crustacean chromatophore: Endocrine regulation and intracellular signalling systems.
AU Nery, Luiz E. M. (1); Castrucci, Ana M. L.
CS (1) Dept. Ciencias Fisiologicas, Lab. Zoofisiologia, Fundacao Universidade Federal do Rio Grande, Rio Grande - SP, 96201-900 Brazil
SO Wiese, Konrad [Editor]. (2002) pp. 98-112. The Crustacean Nervous System,. print.
Publisher: Springer-Verlag GmbH & Co. KG Heidelberger Platz 3, D-14197, Berlin, Germany.
ISBN: 3-540-66900-0 (cloth).
DT Book
LA English

L2 ANSWER 2 OF 6 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2002351898 EMBASE
TI The physiology of flatfish chromatophores.
AU Burton D.
CS D. Burton, Department of Biology, Ocean Sciences Centre, Memorial University of Newfoundland, St. John's, Nfld. A1B 3X9, Canada
SO Microscopy Research and Technique, (15 Sep 2002) 58/6 (481-487).
Refs: 49
ISSN: 1059-910X CODEN: MRTEEO
CY United States
DT Journal; General Review
FS 013 Dermatology and Venereology
029 Clinical Biochemistry
LA English
SL English
AB Most flatfish, of the order Pleuronectiformes, possess a white lower side, and a brown or grey upper side. This upper side can display integumentary patterning with dark areas and colored or white spots. Chromatophores in flatfish are dermal and epidermal ***melanophores*** , as well as dermal ***xanthophores*** , erythrophores, ***iridophores*** , and ***leucophores*** , combinations of which contribute to the color and patterning. Cellular studies demonstrate pattern-related differences in numerical distribution between the types of chromatophores, and in their size, both of which will enhance contrast between areas of the pattern. As well as these morphological characteristics, there are also clear physiological differences, with ***melanophores*** from various areas of the patterns demonstrating differential responsiveness to background and to stress/excitement stimuli. Regulation of flatfish ***melanophore*** responses is predominantly neural, through the sympathetic nervous system; the pituitary hormones in these fish function in maintaining final equilibria in physiological adaptations to backgrounds. ***Melanophores*** from main components of patterns also respond differently in vitro to electrical stimulation, to pituitary hormones, and to sympathomimetic drugs and their antagonists. Sensitivity characteristics with .alpha.- and .beta.-adrenergic pharmacological reagents in vitro indicate the existence of a pattern-related balance in .alpha.- and .beta.-adrenoceptor mediation in ***melanophore*** regulation. The patterning mechanism is complex, with both morphological and physiological differences at the chromatophore level, as well as involvement of central processing and control, which remains to be analysed. .COPYRGT. 2002 Wiley-Liss, Inc.

L2 ANSWER 3 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2000:492041 BIOSIS
DN PREV200000492162
TI The regulation of motile activity in fish chromatophores.
AU Fujii, Ryozo (1)
CS (1) 3-22-15, Nakaizumi, Komae, Tokyo, 201-0012 Japan
SO Pigment Cell Research, (October, 2000) Vol. 13, No. 5, pp. 300-319. print.
ISSN: 0893-5785.
DT General Review
LA English
SL English
AB Chromatophores, including ***melanophores*** , ***xanthophores*** , erythrophores, ***leucophores*** and ***iridophores*** , are responsible for the revelation of integumentary coloration in fish. Recently, blue chromatophores, also called cyanophores, were added to the list of chromatophores. Many of them are also known to possess cellular motility, by which fish are able to change their integumentary hues and patterns, thus enabling them to execute remarkable or subtle chromatic adaptation to environmental hues and patterns, and to cope with various ethological encounters. Such physiological color changes are indeed crucial for them to survive, either by protecting themselves from predators or by increasing their chances of feeding. Sometimes, they are also useful in courtship and mutual communications among individuals of the same species, leading to an increased rate of species survival. Such strategies are realized by complex mechanisms existing in the endocrine

and/or nervous systems. Current studies further indicate that some paracrine factors such as endothelins (ETs) are involved in these processes. In this review, the elaborate mechanisms regulating chromatophores in these lovely aquatic animals are described.

L2 ANSWER 4 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1994:152619 BIOSIS
DN PREV199497165619
TI The expression of cell adhesion molecules in ***leucophores*** in Oryzias latipes.
AU Fukuzawa, Toshihiko; Obika, Masataka
CS Dep. Biol., Keio Univ., Hiyoshi, Kohoku-ku, Yokohama 223 Japan
SO Zoological Science (Tokyo), (1993) Vol. 10, No. SUPPL., pp. 154. Meeting Info.: Sixty-fourth Annual Meeting of the Zoological Society of Japan Okinawa, Japan November 20-23, 1993
ISSN: 0289-0003.
DT Conference
LA English

L2 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1993:184563 CAPLUS
DN 118:184563
TI Expression and transmission of wild-type pigmentation in the skin of transgenic orange-colored variants of medaka (Oryzias latipes) bearing the gene for mouse tyrosinase
AU Matsumoto, Jiro; Akiyama, Toyoko; Hirose, Euichi; Nakamura, Mizuho; Yamamoto, Hiroaki; Takeuchi, Takuji
CS Dep. Biol., Keio Univ., Yokohama, 223, Japan
SO Pigment Cell Research (1992), 5(5, Pt. 2), 322-7
CODEN: PCREEA; ISSN: 0893-5785
DT Journal
LA English
AB Transgenic fish carrying a reconstructed mouse tyrosinase gene, mg-Tyrs-J, were produced by microinjecting the gene into the oocyte nucleus of an orange-colored variant of medaka (Oryzias latipes). Of 64 oocytes microinjected and subsequently inseminated, 13 embryos developed normally beyond hatching and three of them exhibited brown skin pigmentation in the adult as was commonly obsd. in the wild type of this species. Light and electron microscopic examn. disclosed a ubiquitous distribution of typical ***melanophores*** in the skin of these transgenic fish. Judging from their population d. and distribution pattern, it was presumed that melanogenesis in these fish was elicited in amelanotic ***melanophores*** that resided in the skin of the orange-colored fish of this variant. Immunofluorescence with use of the anti-mouse tyrosinase antiserum lacking reactivity to medaka tyrosinase clearly disclosed that the gene introduced was expressed in the ***melanophores*** of transgenic fish. Crosses of female transgenic fish and males from an orange-colored variant yielded offspring exhibiting wild-type or orange-colored pigmentation in a ratio of 1:1, thus implying that mg-Tyrs-J integrated into the medaka genome behaves like a dominant gene. Little melanogenesis was obsd. in ***xanthophores*** , ***leucophores*** and ***iridophores*** in transgenic fish, suggesting possible specificity in recognition of teleostean cell types (i.e., ***melanophores***) by the regulatory region of the mouse tyrosinase gene.

L2 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
AN 1987:84247 BIOSIS
DN BA83:42825
TI ACTION OF MELANIN-CONCENTRATING HORMONE MCH ON TELEOST CHROMATOPHORES.
AU OSHIMA N; KASUKAWA H; FUJII R; WILKES B C; HRUBY V J; HADLEY M E
CS DEP. BIOL., FAC. SCI., TOHO UNIV., MIYAMA, FUNABASHI, CHIBA 274, JPN.
SO GEN COMP ENDOCRINOL, (1986) 64 (3), 381-388.
CODEN: GCENA5. ISSN: 0016-6480.
FS BA; OLD
LA English
AB The in vitro effects of synthetic salmon melanin-concentrating hormone (MCH) on chromatophores of four teleost species were studied. In the erythrophores of the platyfish (Xiphophorus maculatus) and the swordtail (Xiphophorus helleri), and in the ***xanthophores*** and amelanotic ***melanophores*** of the medaka (Oryzias latipes), pigment aggregation took place in response to MCH even in the absence of Ca2+. In contrast to this, the ***leucophores*** of the medaka responded to MCH by the pigment dispersion but only when Ca2+ was present. The motile ***iridophores*** of the blue damselfish (Chrysiptera cyanea), which play a predominant role in coloration and its changes, were not affected by the hormone. Pharmacological studies employing various blocking agents suggest that the pigment-aggregating action of MCH is probably mediated through specific receptors possessed by the erythrophores, ***xanthophores*** , or amelanotic ***melanophores*** , while the pigment-dispersing action on the ***leucophores*** might be revealed through the receptors for ***melanophore*** -stimulating hormone (MSH).

=> s see through or transparen?
L3 152440 SEE THROUGH OR TRANSPAREN?

=> s l3 (3s) medaka
L4 19 L3 (3S) MEDAKA

=> s l3 (3s) fish
L5 801 L3 (3S) FISH

=> d bib abs

L5 ANSWER 1 OF 801 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2002:524975 BIOSIS
DN PREV200200524975
TI Native and alien fishes in a California estuarine marsh: Twenty-one years of changing assemblages.
AU Matern, Scott A. (1); Moyle, Peter B.; Pierce, Leslie C.
CS (1) Department of Wildlife, Fish, and Conservation Biology, University of California-Davis, 1 Shields Avenue, Davis, CA, 95616-8751: samatern@juno.com USA
SO Transactions of the American Fisheries Society, (September, 2002) Vol. 131, No. 5, pp. 797-816. print.
ISSN: 0002-8487.
DT Article
LA English
AB We used monthly otter trawling and beach seining to sample the fishes of Suisun Marsh in the San Francisco Estuary from 1979 to 1999. We collected nearly 173,000 ***fish*** , mostly young of the year, representing 28 native species and 25 alien species. Catch data were related to temperature, salinity, water ***transparency*** , and several measures of freshwater inflow into the marsh. Species abundance and distribution within the marsh were the product of several interacting factors: (1) the timing and place of reproduction of the abundant resident species, (2) past reproductive success, (3) habitat differences among sloughs, and (4) physiological tolerance. We did not find consistent groups of potentially interacting species, although some native species showed weak concordance in abundance. The lack of persistent ***fish*** assemblages is related to the naturally fluctuating environmental conditions of the estuary, the overall decline in ***fish*** abundance through time, and the frequent invasions of alien fishes and invertebrates. Our results suggest that the ***fish*** assemblages in Suisun Marsh will continue to be unpredictable until estuarine processes approach their historic range of variability and alien invasions are halted.

=> s l3 (3a) fish
L6 82 L3 (3A) FISH

=> d bib abs

L6 ANSWER 1 OF 82 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2002:484155 BIOSIS
DN PREV200200484155
TI Multisensory contributions to the shelter-seeking behavior of a mormyrid fish, Gnathonemus petersii Gunther (Mormyridae, Teleostei): The role of vision, and the passive and active electrosenses.
AU Rojas, Roland; Moller, Peter (1)
CS (1) Department of Ichthyology, American Museum of Natural History, New York, NY, 10024-5192: pemo@amnh.org USA
SO Brain Behavior and Evolution, (2002) Vol. 59, No. 4, pp. 211-221. http://www.karger.com/journals/bbe/bbe_jh.htm. print.
ISSN: 0006-8977.
DT Article
LA English
AB This study examined how weakly electric fish, Gnathonemus petersii, integrate multiple sensory modalities (passive and active electrosenses, and vision) to maintain proximity to tubular structures, serving as the fish's hiding place or shelter during the daytime. By moving the shelter along a linear 2-meter path, causing a mechanical disturbance, we challenged the fish's shelter-seeking behavior and used the length of travel that shelter proximity was maintained (contact distance) as an indicator of how well the animal maintained its shelter. In order to determine the contribution of vision and electrosense to this behavior, four groups of fish were tested in which: (1) all three modalities were intact; (2) vision alone was eliminated by optic nerve transection; (3) the active electrosense was silenced by spinal cord transection rendering the electric organ inoperative; and (4) both vision and active electrosense were deactivated. Further elimination or minimization of various sensory cues was achieved by testing the ***fish*** with optically ***transparent*** , acrylic shelters (Plexiglas) that stimulate active, but not passive, electrosense, and aluminum shelters that theoretically stimulate all three modalities. As expected, performance was optimal when all three modalities were operating, but better than expected from quantitative models based on additive processes alone. Although the absence of one sense (vision or active electrosense) caused initial deficits, these were fully compensated for over repeated daily exposure to the task, suggesting that learning might generate sensory substitution and/or the formation of sensory expectation. Finally, environmental conditions, such as shelter opacity, also affected shelter-seeking performance, sometimes in a negative direction. These results demonstrate that: (1) the integration of multiple sensory inputs in G. petersii can be synergistic, additive, redundant, or even inhibitory, and (2) multisensory processes also take into account the respective sensory cues; i.e. (a) the prevailing ambient light intensity and optical qualities of the object; (b) the geometry and strength of the DC potential emanating from the object ('battery effect'); and (c) the complex perceived impedance differential with the surrounding medium.

=> d his

(FILE 'HOME' ENTERED AT 19:32:46 ON 19 OCT 2002)

FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 19:33:34 ON 19 OCT 2002
L1 7 S IRIDOPHORE? AND MELANOPHORE? AND XANTHOPHORE? AND LEUCOPHORE?
L2 6 DUP REM L1 (1 DUPLICATE REMOVED)
L3 152440 S SEE THROUGH OR TRANSPAREN?
L4 19 S L3 (3S) MEDAKA
L5 801 S L3 (3S) FISH
L6 82 S L3 (3A) FISH

=> dup rem l4
PROCESSING COMPLETED FOR L4
L7 10 DUP REM L4 (9 DUPLICATES REMOVED)

=> d bib abs 1-
YOU HAVE REQUESTED DATA FROM 10 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 2001:909973 CAPLUS
DN 136:49336
TI Transgenic ***see*** - ***through*** ***medaka*** ***transparent*** throughout life, having pigments genetically removed and germ cell-specific expression of GFP, easy sex determination
IN Wakamatsu, Yuko; Sagari, Kenjiro; Tanaka, Minoru; Kinoshita, Masato
PA Japan
SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001346480	A2	20011218	JP 2000-172375	20000608

AB ***Transparent*** ***see*** - ***through*** ***medaka*** generated by cross breeding pigment deficient strains, and expressing green fluorescent protein (GFP) specifically in germ cells for easy sex detn., are disclosed. These ***medaka*** lack brown, black, and yellow pigments, and sex can be easily detd. based on the presence or absence of a DNA marker, SL1, located on Y chromosome. The ***see*** - ***through*** ***medaka*** is a vertebrate model with a ***transparent*** body in the adult stage, as well as during the embryonic stages, that was generated from a small lab. fish, ***medaka*** (Oryzias latipes). In this fish model, most of the pigments are genetically removed from the entire body by a combination of recessive alleles at four loci. The main internal organs, namely, heart, spleen, blood vessels, liver, gut, gonads, kidney, brain, spinal cord, lens, air bladder, and gills, in living adult fish are visible to the naked eye or with a simple stereoscopic microscope. This fish is healthy and fertile. A transgenic ***see*** - ***through*** ***medaka*** was produced by using the green fluorescent protein (GFP) gene fused to the regulatory regions of the ***medaka*** vasa gene, in which germ cell-specific expression of GFP was visualized. The fluorescent tag also efficiently improved visibility of gonadal tissues. The process of oocyte maturation in the ovary was monitored by repeated observations from the outside of the body during one spawning cycle in the same living females of the transgenic ***see*** - ***through*** stock. The ***see*** - ***through*** ***medaka*** will provide an opportunity for noninvasive studies of morphol. and mol. events that occur in internal organs in the later stages of life.

L7 ANSWER 2 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
1
AN 2001:464679 BIOSIS
DN PREV200100464679
TI The ***see*** - ***through*** ***medaka*** : A fish model that is ***transparent*** throughout life.
AU Wakamatsu, Yuko (1); Pristyazhnyuk, Sergey; Kinoshita, Masato; Tanaka, Minoru; Ozato, Kenjiro
CS (1) Laboratory of Freshwater Fish Stocks, Bioscience Center, Nagoya University, Furo-cho, Chikusa-ku, Nagoya, 464-8601: wakamatu@bio.nagoya-u.ac.jp Japan
SO Proceedings of the National Academy of Sciences of the United States of America, (August 28, 2001) Vol. 98, No. 18, pp. 10046-10050. print.
ISSN: 0027-8424.
DT Article
LA English
SL English
AB The ***see*** - ***through*** ***medaka*** is a vertebrate model with a ***transparent*** body in the adult stage, as well as during the embryonic stages, that was generated from a small laboratory fish, ***medaka*** (Oryzias latipes). In this fish model, most of the pigments are genetically removed from the entire body by a combination of recessive alleles at four loci. The main internal organs, namely, heart, spleen, blood vessels, liver, gut, gonads, kidney, brain, spinal cord, lens, air bladder, and gills, in living adult fish are visible to the naked eye or with a simple stereoscopic microscope. This fish is healthy and fertile. A transgenic ***see*** - ***through*** ***medaka*** was produced by using the green fluorescent protein (GFP) gene fused to the regulatory regions of the ***medaka*** vasa gene, in which germ cell-specific expression of GFP was visualized. The fluorescent tag also efficiently improved visibility of gonadal tissues. The process of oocyte maturation in the ovary was monitored by repeated observations from the outside of the body during one spawning cycle in the same living females of the transgenic ***see*** - ***through*** stock. The ***see*** - ***through*** ***medaka*** will provide an opportunity for noninvasive studies of morphological and molecular events that occur in internal organs in the later stages of life.

L7 ANSWER 3 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2002:182745 BIOSIS
DN PREV200200182745
TI ***See*** - ***through*** ***medaka*** : A new fish model for studies of the postembryonic development.
AU Wakamatsu, Y. (1); Pristyaznhyuk, S. (1); Kinoshita, M.; Tanaka, M.; Ozato, K. (1)
CS (1) Lab. Freshwater Fish Stocks, Biosci. Center, Nagoya Univ., Nagoya Japan
SO Zoological Science (Tokyo), (December, 2001) Vol. 18, No. Supplement, pp. 61. print.
Meeting Info.: Seventy-Second Annual Meeting of the Zoological Society of Japan Fukuoka, Japan October 06-08, 2001
ISSN: 0289-0003.
DT Conference
LA English

L7 ANSWER 4 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
2
AN 2001:396900 BIOSIS
DN PREV200100396900
TI High incidence of mosaic mutations induced by irradiating paternal germ cells of the medaka fish, Oryzias latipes.
AU Shimada, Atsuko (1); Shima, Akihiro
CS (1) Department of Biological Sciences, School of Sciences, University of Tokyo, Hongo 7-3-1, Bunkyo-ku, Tokyo, 113-0033: kirita@biol.s.u-tokyo.ac.jp Japan
SO Mutation Research, (22 August, 2001) Vol. 495, No. 1-2, pp. 33-42. print.
ISSN: 0027-5107.
DT Article
LA English
SL English
AB Delayed-type mutations induced by radiation have recently been demonstrated in various somatic-cell systems. Such mutations are thought to result from the transmission of genetic instability through many cell divisions subsequent to a single exposure to ionizing radiation. Here, we have examined whether 'transgenerational' delayed-type mutations can arise during embryonic development of the ***medaka*** fish as a result of exposing the sperm and spermatids of live fish to 137 Cs gamma-radiation. To do this, we made use of a sensitive specific-locus test (SLT) for the ***medaka*** that we have recently developed. Because the ***medaka*** has a ***transparent*** egg membrane and embryo body, both visible mosaics and whole-body mutations can be detected during development at an early-expressed pigmentation locus. When wild-type +/+ males were gamma-irradiated and then mated with wl/wl females, the frequency of F1 embryos with both wild-type orange leucophores (wl/+) and mutant-type white leucophores (wl/wl*) (mosaic mutants) was about 5.7X10-3/Gy. The frequency of embryos with only white leucophores (whole-body mutants) was about 1.3X10-3/Gy. These results suggest that delayed mutations frequently arise in ***medaka*** fish embryos that have been fertilized with irradiated sperm. Some possible mechanisms involved in the generation of these delayed mutational events (including genomic instability in the early embryos) are discussed.

L7 ANSWER 5 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2000:105176 BIOSIS
DN PREV200000105176
TI Stages of embryonic development of the ice goby (shiro-uo), Leucopsarion petersii.
AU Arakawa, Tomoko; Kanno, Yasuhiko; Akiyama, Nobuhiko; Kitano, Tadashi; Nakatsuji, Norio; Nakatsuji, Takako (1)
CS (1) Tokai University School of Marine Science and Technology, Shimizu, 424-8610 Japan
SO Zoological Science (Tokyo), (Oct., 1999) Vol. 16, No. 5, pp. 761-773.
ISSN: 0289-0003.
DT Article
LA English
SL English
AB A series of normal stages for the embryonic development of the ice goby (shiro-uo), Leucopsarion petersii, which belongs to the Perciformes, is described. Stages are based on morphological features, by utilizing the optical ***transparency*** of live embryos from the first cleavage to the hatching stage. Fertilized eggs were obtained by artificial insemination and normal embryogenesis was accomplished in a defined medium in plastic petri dishes at 19degreeC. Shiro-uo eggs were surrounded by a very thin and clear chorion and could be dechorionated with forceps very easily. Developmental stages were mostly comparable to those of other fish embryos described so far, but several differences were indicated, such as the third cleavage plane being horizontal, and that the length of the cleavage cycle increased gradually from the very early stages. Also, there were differences in the relative rates of organogenesis of the brain, eyes, otic vesicles, and somites when compared to the zebrafish and ***medaka*** .

L7 ANSWER 6 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
3
AN 1995:107472 BIOSIS
DN PREV199598121772
TI An efficient expression vector for transgenic medaka construction.
AU Takagi, Shigeru; Sasado, Takao; Tamiya, Gen; Ozato, Kenjiro; Wakamatsu, Yuko; Takeshita, Aya; Kimura, Minoru (1)
CS (1) Sch. Med., Tokai Univ. Bohseidai, Isehara, Kanagawa 259-11 Japan
SO Molecular Marine Biology and Biotechnology, (1994) Vol. 3, No. 4, pp. 192-199.
ISSN: 1053-6426.
DT Article
LA English
AB The ***transparency*** and external fertilization of the eggs of ***medaka*** (Oryzias latipes) make them ideally suitable for investigating molecular interactions that occur during vertebrate development. Genetically engineered ***medaka*** is a potential tool for such studies. It requires several types of suitable expression vectors. To obtain abundant and ubiquitous expression of foreign genes in ***medaka*** embryos, we have designed an expression vector that contains the proximal promoter and enhancer elements and polyadenylation signal of the ***medaka*** beta-actin gene. The utility of this "all-***medaka*** " expression vector was examined using the Escherichia coli lacZ gene as a reporter gene. Most of the injected embryo showed high gene expression, and several embryos showed ubiquitous expression even at six days after injection. Of nine individuals derived from the injected embryos and grown until adult stage, one produced expression-positive F-1 fish. The transgene was identified in these F-1 using polymerase chain reaction (PCR). These data revealed that the expression vector based on the expression cassette from the ***medaka*** beta-actin gene should be useful for making transgenic ***medaka*** . The cloned gene in this cassette vector is stably transmittable and efficiently expressible.

L7 ANSWER 7 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
4
AN 1991:226994 BIOSIS
DN BA91:118454
TI DEVELOPMENT OF A POSSIBLE NONMAMMALIAN TEST SYSTEM FOR RADIATION-INDUCED
GERM-CELL MUTAGENESIS USING A FISH THE JAPANESE MEDAKA ORYZIAS-LATIPES.
AU SHIMA A; SHIMADA A
CS LAB. RADIATION BIOL., ZOOLOGICAL INST., FAC. SCI., UNIV. TOKYO, BUNKYO-KU,
TOKYO 113, JAPAAN.
SO PROC NATL ACAD SCI U S A, (1991) 88 (6), 2545-2549.
CODEN: PNASA6. ISSN: 0027-8424.
FS BA; OLD
LA English
AB To develop a specific-locus test (SLT) system for environmental mutagenesis using vertebrate species other than the mouse, we first established a tester shock of the fish ***medaka*** (Oryzias latipes) that is homyozygous recessive at three loci. The phenotypic expression of these loci can be easily recognized early in embryonic development by observation through the ***transparent*** egg membrane. We irradiated wild-type males with 137Cs .gamma.-rays to determine the dose-response relationships for dominant lethal and specific-locus mutations induced in sperm, spermatids, and spermatogonia. Through observation of 322,666 loci in control offspring and 374,026 loci in offspring obtained from 0.64-, 4.75-, or 9.50-Gy-irradiated gametes, specific-locus mutations were phenotypically detected during early development. These putative mutations, designated "total mutation", can be recognized only in embryos of oviparous animals. The developmental fate of these mutant embyros was precisely followed. During subsequently embryonic development, a large fraction died and thus was unvailable for test-crossing, which was used to identify "viable mutations." Our ***medaka*** SLT system demonstrates that the vast majority of total mutations is associated with dominant lethal mutations. Thus far only one spontaneous viable mutation has been observed, so that all doubling calculations involving this end-point carry a large error. With these reservations, however, we conclude that the quantitative data so far obtained from the ***medaka*** SLT are quite comparable to those from the mouse SLT and, hence indicate the validity of the ***medaka*** SLT as a possible nonmammalian test system.

L7 ANSWER 8 OF 10 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 90327935 EMBASE
DN 1990327935
TI Development of muscle nerve in the teleost fish, medaka.
AU Ishikawa I.
CS Department of Anatomy, Faculty of Medicine, University of the Ryukyus,Okinawa 903-01, Japan
SO Neuroscience Research, (1990) 8/SUPPL. 13 (S152-S156).
ISSN: 0168-0102 CODEN: NERADN
CY Ireland
DT Journal; Conference Article
FS 001 Anatomy, Anthropology, Embryology and Histology
021 Developmental Biology and Teratology
LA English
SL English
AB The entire process of normal development of a muscle nerve to a muscle (middle interradial muscle) in the tail region of the ***medaka*** (Oryzias latipes) is briefly reported. The nerve was stained immunohistochemically by using anti-neurofilament protein antibodies or stained by HRP and DiI labeling methods. The muscle was stained immunohistochemically by using anti-troponin T and anti-desmin antibodies. The smallness and ***transparency*** of the ***medaka*** embryos provide us with an opportunity to examine nerve-muscle development in whole-mount specimens. Our observations suggest that prior to the appearance of the middle interradial muscle a neural pathway has established, extending from the starting point to the 'door step' of the muscle.

L7 ANSWER 9 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
5
AN 1988:221515 BIOSIS
DN BA85:110750
TI INDUCTION OF MUTATIONS IN MALES OF THE FISH ORYZIAS-LATIPES AT A SPECIFIC
LOCUS AFTER GAMMA-IRRADIATION.
AU SHIMA A; SHIMADA A
CS LAB. RADIATION BIOL., ZOOLOGICAL INST., FAC. SCI., UNIV. TOKYO, BUNKYO-KU,
TOKYO 113.
SO MUTAT RES, (1988) 198 (1), 93-98.
CODEN: MUREAV. ISSN: 0027-5107.
FS BA; OLD
LA English
AB We have studied frequencies of mutations induced at the b locus of the fish, ***Medaka*** Oryzias latipes, after .gamma.-irradiation. Homozygotes for the b locus have colorless melanophores whose phenotypic expression can be distinguished from that of the wild type. An advantage of the use of oviparous fish for detection of skin color mutations is that the mutant phenotype can be confirmed as early as 1.5 days after fertilization because of the ***transparent*** egg membrane of the embryo. Wild-type (B/B) male fish were exposed to 4.75 or 9.5 Gy of 137Cs .gamma.-rays at a dose rate of 0.95 Gy/min and then mated with the female testers (b/b). A total of 77761 F1 offspring were examined for mutation and other abnormalities. In the control, we had 1 mutant among 22068 offspring, resulting in a mutation rate of 4.53 .times. 10-5/locus/gamete. However, this mutant embryo died before hatching. Therefore, in an attempt to present specific-locus mutation frequencies in the fish, the frequencies of color mutants that survived more than 4 days after hatching were used as frequencies of viable mutants; (number of viable color mutants)/(number of hatched fry that survived more than 4 days after hatching). In the 4.75 Gy-irradiated group the viable mutant frequencies were 45.0 .times. 10-5, 69.7 .times. 10-5 and 0/locus/gamete, while exposure to 9.5 Gy resulted in mutation rates of 217 .times. 10-5, 130 .times. 10-5 and 8.06 .times. 10-5, respectively, for sperm, spermatids and spermatogonia. In comparison with viable color mutant frequencies those of the total color mutants, which include such mutants as ones that died before hatching (defined as number of total color mutants/number of fertilized eggs minus number of early deaths), were considerably higher. For sperm, spermatids, and spermatogonia after exposure to 4.75 Gy, the frequencies were 1180 .times. 10-5, 629 .times. 10-5 and 9.90 .times. 10-5/locus/gamete, respectively, and in 9.5-Gy-irradiated fish, the frequencies were 1940 .times. 10-5, 953 .times. 10-5 and 55.5 .times. 10-5. Although our data are incomplete, the present results were compared with mutation induction in mice. We concluded that the frequencies of viable color mutants in the fish can be compared with those in mice.

L7 ANSWER 10 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
6
AN 1980:172700 BIOSIS
DN BA69:47696
TI THE EFFECTS OF TOLUENE ON EMBRYOS AND FRY OF THE JAPANESE MEDAKA
ORYZIAS-LATIPES WITH A PROPOSAL FOR RAPID DETERMINATION OF MAXIMUM
ACCEPTABLE TOXICANT CONCENTRATION.
AU STOSS F W; HAINES T A
CS LIFE MATER. SCI. DIV., CENT. CHEM. HAZARD ASSESS., SYRACUSE RES. CORP.,
MERRILL LANE, SYRACUSE, N.Y. 13210, USA.
SO ENVIRON POLLUT, (1979) 20 (2), 139-148.
CODEN: ENVPAF. ISSN: 0013-9327.
FS BA; OLD
LA English
AB Fertilized eggs at various stages of development and newly hatched fry of ***medaka*** , O. latipes, were exposed to a series of concentrations of the water-soluble extract of toluene. Static bioassays were conducted and TL50 [median tolerance limit] calculations made. The embryos were examined for the presence of developmental anomalies. The mean 96 h TL50 for eggs was 54 mg/l. The early (< 3.5 h) and late (> 192 h) stages were more sensitive than the average. The newly hatched fry were not as sensitive to toluene as were the embryos. Concentrations of toluene as low as 41 mg/l produced teratogenic effects in susceptible embryos. The observation of these defects in the ***transparent*** eggs constitutes a simple and rapid tool for the estimation of Maximum Acceptable Toxicant Concentration (MATC) for fish.

=> d his

(FILE 'HOME' ENTERED AT 19:32:46 ON 19 OCT 2002)

FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 19:33:34 ON 19 OCT 2002
L1 7 S IRIDOPHORE? AND MELANOPHORE? AND XANTHOPHORE? AND LEUCOPHORE?
L2 6 DUP REM L1 (1 DUPLICATE REMOVED)
L3 152440 S SEE THROUGH OR TRANSPAREN?
L4 19 S L3 (3S) MEDAKA
L5 801 S L3 (3S) FISH
L6 82 S L3 (3A) FISH
L7 10 DUP REM L4 (9 DUPLICATES REMOVED)

=> s l1 and l6
L8 0 L1 AND L6

=> s l4 and l1
L9 0 L4 AND L1

=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	ENTRY	SINCE FILE SESSION	TOTAL
FULL ESTIMATED COST		65.62	65.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	ENTRY	SINCE FILE SESSION	TOTAL
CA SUBSCRIBER PRICE		-1.24	-1.24

STN INTERNATIONAL LOGOFF AT 19:43:34 ON 19 OCT 2002